IN THE CLAIMS:

1.-7. (Cancel)

8. (New) A recording/reproducing apparatus comprising:

an interface for converting an input signal to binary data;

an interleaver for segmenting the converted binary data into a plurality of data blocks;

a coding circuit for performing the error correcting coding operation for each of said data blocks using an elliptic code on a finite $GF(2^m)$ where m is a positive integer, wherein a length of said elliptic code is longer than $2^m - 1$ and not more than $2^m + 2^{1+m/2}$;

a signal processing circuit for converting the data block subjected to the error correcting coding operation into an analog signal for recording in a recording medium, and converting the analog signal read from said recording medium into binary data; and

a decoding circuit for detecting and correcting an error of the binary data converted by said signal processing circuit using said elliptic code,

wherein said coding circuit comprises:

means for generating redundant symbols based on input symbol stream from said interleaver; and

a selector which selectively outputs the generated redundant symbols.